Attorney's Docket No.: 10278-009001

HE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Allan M. Miller et al.

Art Unit : 1653

Serial No.: 09/407,605

Examiner: H. Robinson

TECH CENTER

Filed

: September 28, 1999

Title

: OPTIMIZED MESSENGER RNA

COPY OF DARES ORIGINALLY FILE

## **BOX AF**

Commissioner for Patents Washington, D.C. 20231

## **AMENDMENT AND RESPONSE**

In response to the final action mailed January 29, 2001, please amend the application as follows:

## In the claims:

All the pending claims are reproduced below for the Examiner's convenience. Please amend claims 64, 69, 73, 81, 85, 89, 90, 97-98, 100, 102-104, 113, 114, 116, 119, 120, 25, 130 and 135 as follows:

64. (Twice Amended) A synthetic nucleic acid sequence which encodes a human protein wherein at least one non-common codon or less-common codon has been replaced by a common codon encoding the same amino acid residue as the non-common or less-common codon, and the synthetic nucleic acid sequence comprises a continuous stretch of at least 150 codons all of which are common codons, wherein by a common codon is meant the most common codon encoding each particular amino acid residue in highly expressed human genes as shown in Table 1.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

Thereby certify under 37 CFR \$1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231